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I declare that I am an independent inventor and have (1) not assigned, granted, conveyed nor licensed this invention, and (2) am under no obligation under contract, law nor otherwise, to assign, grant, convey or license any rights in this invention including (i) the right to make, use or sell the invention, and (ii) the right to exclude others from making, using or selling the invention to any person who could not likewise be classified as an independent inventor if that person had made the invention, or to any concern which would not qualify as a small business concern or a non-profit organization under §1.9 of the Patent Office Rules of Practice.

I hereby declare additionally that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful, false statements and the like so made are punishable by fine or imprisonment, or both, under §1001 of Title 18 of the United States Code and that such willful, false statements may jeopardize the validity of the application or any patent issuing thereon.

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UNITED STATES PATENT APPLICATION

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METHOD OF SUPPLYING AND DISPENSING PRESCRIBED MEDICAL SUPPLIES THROUGH A WEB SITE ASSOCIATED WITH A MEDICAL CARE PROVIDER

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METHOD OF SUPPLYING AND DISPENSING PRESCRIBED MEDICAL SUPPLIES THROUGH A WEB SITE ASSOCIATED WITH A MEDICAL CARE PROVIDER

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to a system and method of prescribing and delivering medical supplies through an Internet web site associated with the prescribing medical care provider.

2. Description of the Related Art

Physicians are continuously confronted with patients who need medical supplies as part of a treatment associated with their illness or condition. These may be walkers, slings, special splints, or the like. These devices can be fairly specialized, not particularly inexpensive and somewhat hard to find in your average drug store. In large communities or cities, a specialty store may exist allowing the in-store purchase of such supplies without too much inconvenience to the patient. However, in smaller communities, patients may find it extremely difficult to locate a specialized supply that a doctor has told them that they need. This may be especially true in situations where the patient has limited mobility or poor access to transportation.

In the present, the patient must scrounge the means to locate and travel to the specialty store, only to be told potentially that the item in question must be ordered from a manufacturer, adding delay to time before the patient receives the item in question.

The Internet and its proliferating web pages may facilitate some commerce in the medical industry. However, there remains a dearth of companies that provide medical supplies for sale over the Internet. Even where such companies do exist, patients may have a difficult time locating the appropriate web site. Further, even when the right web site is located, the

medicalese language used on the web site may make it difficult for the patient to locate the object best suited for his needs. Still further, not every patient may have access to the Internet, or be computer savvy enough to navigate even the simplest of web sites.

In short, there remains a need for a user friendly web site that allows e-commerce to take place in the field of medical supplies, and particularly one that is managed by the prescribing physician to ensure that appropriate supplies are available for selection by patients, and that the site is tailored to the level of sophistication of the patients with which the particular managing physician deals.

SUMMARY OF THE INVENTION

A physician or other approved medical care provider is well suited to solve the problems in the prior art. The medical care provider initially creates a network gateway, such as a web page on the Internet. The web page lists at a minimum a number of medical supplies that the provider is likely to prescribe to patients. In the preferred embodiment, photos of the supplies, detailed descriptions of the supplies, and instructions on the use of the supplies are also present. Further, if the supplies are available in a plurality of sizes, the various sizes and models are detailed in similar fashion. The gateway acts as a platform from which a viewer may make a purchase of a desired supply as is explained in greater detail below.

The medical care provider prescribes a medical supply to a patient as a result of an appropriate consultation. Knowing what is available on the gateway, the provider may explicitly identify the make, model and size that the patient requires with confidence that it is available on the gateway. The patient may access the gateway from a computer, such as one located in the patient's home or in the provider's office and select the appropriate prescribed item or supply. The gateway communicates this selection to an appropriate medical supply vendor, preferably

through an e-commerce provider who accepts payment information from the patient. Payment may initially be made to the e-commerce provider, the medical supply vendor, or the provider's account. The medical supply vendor ships the product to the patient and the financial side of the transaction is sorted out in due course such that the vendor is paid, the e-commerce provider is paid and the medical care provider is paid. The patient then has the supply without having to travel to a specialty store or worry about whether the item will be in stock. Rather the product is delivered to the patient's address by suitable courier.

Other objects and advantages of the present invention will become apparent and obvious from a study of the following description and the accompanying drawings which are merely illustrative of such invention.

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 is a block diagram of the network of the present invention;

Figure 2 is a flow chart of the method of the present invention; and

Figures 3A and 3B show exemplary medical care provider web pages of the type that might be used to carry out the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

The present invention provides a technique for a medical care provider to assist his or her patients in purchasing and securing the proper medical supply for treatment. The disclosure will speak in terms of the medical care provider being a doctor, but it should be appreciated that other medical professionals such as nurse practitioners, physician assistants, chiropractors, or the like may all fall under the title medical care provider. As used herein, the term "medical supply" includes pharmaceutical products as well as more traditional medical devices. As used herein, the term "medical device" includes the class of products such as crutches, slings, splints,

bandages, walkers, prostheses, and the like. This list is intended to be exemplary and not limiting with respect to the items that fall within the definition of the term "medical device." Further, as used herein "prescribe" shall be interpreted as "to designate or order the use of as a remedy."

As shown in Figure 1, this technique is facilitated by a system 10 formed from a plurality of computers. Specifically, the doctor establishes a web page 12, that is viewable from a computer such as a doctor's office computer 14, and preferably also from a patient's computer 16. The web page 12 communicates with at least one medical supply vendor computer 18. Additional medical supply vendor computers 20 may be communicated with as needed or desired. The communication with the medical supply vendor computers 18 and 20 preferably takes place through an e-commerce provider 22. Additionally, the computers should have the appropriate financial record keeping ability to track purchases, accept payment, credit, and debit the appropriate accounts. Of particular interest for the medical care provider is the doctor's transaction account 24, but it should be understood that the e-commerce provider 22 and the medical supply vendors also have transaction accounts.

The preferred implementation of the present invention is that the doctor's web page 12 be created with a hypertext language such as HTML, SGML, HDML or XML and that the computers are interconnected by the Internet. Communication therebetween may take place via e-mail or other standard communication formats as is well known in the computer industry. Where financial information such as a credit card number is being transmitted, appropriate encryption or other security measures may be put in place to ensure that the sensitive financial information is not stolen. However, the interconnection could take place over a dedicated network. While feasible, such dedicated networks are relatively expensive, and the volume of

communication may not justify such an investment. Furthermore, the use of a dedicated network may inhibit the ability of the patient to access the doctor's web page 12 from the patient computer 16 unless the doctor's web page 12 has an external phone line and allows patients to log in through a modem or other equivalent technique. It is preferred that the doctor's computer 14 acts as the server for the web page 12, but this is not required. Instead, a second host computer may act as the server for the web page 12 and the doctor's computer 14 merely access the host as needed. It should be appreciated that while the preferred embodiment of the present invention works through an e-commerce provider, it is possible to implement the functionality into the computer hosting the doctor's web page 12.

An exemplary web page 12 is seen in Figure 3. Web page 12 acts as a network gateway and includes a static frame 30 and an active frame 32. The static frame 30 may include a number of links 34 that are activatable by a cursor 36. Example links may include the curricula vitae of the doctor, directions to the office, contact information, a "home" link, a pharmacy link, and a "SUPPLIES" link. Further, it is expected that the medical care provider will use the web page to educate and inform his patients and thus there may be provided links to other medical web sites of interest, a Frequently Asked Question (FAQ) page, medical periodicals, or the like. These may be related to research that the medical care provider is involved in, interested in, or otherwise feels may be helpful to his patients. Activation of a link 34 in the static frame 30 may change the display in active frame 32. In fact, web pages from remote computers may be opened within active frame 32 without changing static frame 30. Thus, upon initially accessing the doctor's web page 12, version A may be seen. After clicking on link 38 to "SUPPLIES" version B may be seen wherein the active frame 32 now displays a web page from one of the medical supply vendor computers 18 or 20. It should be appreciated that while only one "SUPPLIES"

link 38 is shown, a plurality of such links, with more specific appellations like prostheses, slings, splints, etc., may also be provided. Alternatively, a single "SUPPLIES" link 38 may take the user to an intermediate page that has a number of different vendors listed.

Further, the "SUPPLIES" link 38 may be merged with the "PHARMACY" link in keeping with the definition of medical supply. While the regulations surrounding the on-line purchase of pharmaceutical products continues to evolve, it is expected that this commercial activity will be allowed in some form. Therefore, the present invention is designed to allow the purchase of pharmaceutical products as well as other medical devices. Pharmaceutical distributors or suppliers may be viewed as medical supply vendors as used herein.

With the system 10 provided, the medical care provider is then able to help his patients find and purchase the proper medical supply. The preferred method is seen in flow chart form in Figure 2. Specifically, the doctor performs a typical consultation and prescribes a particular medical supply, and where appropriate a specific size (block 100). Because the doctor is familiar with the links 34 on the web page 12, the doctor may provide more precise information about the nature of the supply needed, confident in the knowledge that the exact supply is available through the web page 12. The patient may then access the doctor's web page 12, either from his computer 16 or from the doctor's computer 14 (block 102). The patient, armed with the doctor's order, may then click on the "SUPPLIES" link (block 104). In one embodiment, each medical supply vendor computer 18 or 20 has its own web page with products available listed thereon. These vendor web pages are opened in the active display 32 for perusal by the patient. In another embodiment, all the product information is part of the doctor's web page. In either case, the patient may select the supply that the doctor prescribed (block 106). The patient is then prompted for payment information. E-commerce is becoming more prevalent, and techniques to

ensure privacy, pop-up screens for credit card information entry, and the like are increasingly well known, and will not be discussed further. Regardless of the particular implementation, the patient enters payment information (block 107).

The doctor's web page, and more particularly the computer serving as the host to the web page sends the order to the e-commerce provider 22 (block 108). The e-commerce provider then authorizes payment from the patient's account (block 110). For example, if the patient has tendered payment with a credit card number, the e-commerce provider could contact the credit card company hosting the account and secure payment therefrom. This process is well understood in the art and will not be further discussed.

In a first aspect of the invention, the e-commerce provider 22 credits the doctor's transaction account 24 (block 112), and places the appropriate order with the medical supply vendor (block 114). The vendor then ships the product to the patient (block 116), and the vendor then bills the doctor (block 118). The e-commerce provider 22 takes a transaction fee and everyone gets paid. As would be understood, the shipping is preferably performed by a common carrier such as FEDERAL EXPRESS®, AIRBORNE EXPRESS®, UPS®, local courier or the United States Postal Service.

In a second aspect of the invention, the e-commerce provider 22 credits the vendor's transaction account, while holding back a transaction fee, and places the appropriate order (block 114). The vendor ships the product (block 116) and the vendor directs a referral fee to the doctor's transaction account.

In a third aspect of the invention, wherein the e-commerce provider is integrated into the doctor's web page 12, the doctor's account 24 is credited immediately, and the web page host computer orders the device from the vendor (block 114). After the vendor ships the product

(block 116), the doctor's account 24 credits the vendors account or the vendor bills the doctor's account 24 (block 118).

Other variations of arranging payment between the parties is also well within the scope of the present invention. The present invention offers solutions heretofore unavailable to patients and medical care providers in that the medical care provider has direct knowledge of what products are available on his web page 12, and thus can tailor prescriptions to make sure that the appropriate product is available for purchase by the patient. Additionally, the patient is better served in that he or she gets the supply needed, without having to travel to a specialty store. Overnight delivery ensures that the product arrives in a timely fashion.

Additionally, the medical care provider may walk the patient through the ordering process on the doctor's computer 14. Thus, the medical care provider may go through the links until the desired medical supply is located and then allow the patient to complete the financial side of the transaction as previously described.

The present contemplates providing or ordering medical supplies through an e-commerce format that revolves around a medical doctor or other licensed medical care provider. In particular, the doctor or licensed medical provider will examine a patient and make a diagnosis based on such examinations. Thereafter the doctor or licensed medical care provider will make decisions based on the examination and diagnosis made and thereafter will order appropriate medical supplies that can be procured by the patient or the doctor through the e-commerce format disclosed herein.

The present invention may, of course, be carried out in other specific ways than those herein set forth without departing from the spirit and essential characteristics of the invention. The present embodiments are, therefore, to be considered in all respects as illustrative and not

CLAIMS

What is claimed is:

1. A method of assisting a patient locate and purchase a needed medical supply, comprising:
 - a) prescribing from a medical care provider to a patient a needed medical supply;
 - b) providing a network gateway associated with said medical care provider, the gateway accessible through a computer interface;
 - c) conveying order information to a medical supply vendor through the gateway; and
 - d) arranging payment through the gateway.
2. The method of claim 1 wherein providing a network gateway comprises providing a web page.
3. The method of claim 1 wherein conveying order information to a medical supply vendor comprises conveying the order information through an e-commerce provider.
4. The method of claim 1 further comprising accepting payment information from the patient.
5. The method of claim 1 further comprising securing payment from a credit card.
6. The method of claim 1 further comprising crediting payment to an account associated with the medical care provider.
7. The method of claim 6 wherein the medical supply vendor bills the medical care provider.

8. The method of claim 1 wherein prescribing from a medical care provider to a patient a needed medical supply comprises prescribing a medical device.

9. The method of claim 1 wherein prescribing from a medical care provider to a patient a needed medical supply comprises prescribing a pharmaceutical.

10. A system for assisting a patient locate and purchase a needed medical supply, said system comprising a computer configured to:

provide a network gateway associated with a medical care provider, said gateway adapted to facilitate the location and purchase of a prescribed medical supply, wherein said prescribed medical supply was prescribed by the medical care provider;

convey order information to a medical supply vendor through the gateway; and
arrange payment through the gateway.

11. A computer readable medium comprising software configured to:

provide a network gateway associated with a medical care provider, said gateway adapted to facilitate the location and purchase of a prescribed medical supply, wherein said prescribed medical supply was prescribed by the medical care provider;

convey order information to a medical supply vendor through the gateway; and
arrange payment through the gateway.

12. A method of ordering a prescribed medical supply via a web site particularly associated with a prescribing medical care provider, comprising:

- a. prescribing a medical supply for a patient wherein the prescription is made by the medical care provider;
- b. ordering the prescribed medical supply through the web site associated with the prescribing medical care provider, including the steps of:
 - i. accessing the web site of the prescribing medical care provider;
 - ii. locating a medical supply store associated with the prescribing medical care provider's web site;
 - iii. searching the medical supply store for the prescribed medical supply;
 - iv. after locating the prescribed medical supply on the prescribing medical care provider's web site, ordering the medical supply from a vendor linked to the web site of the prescribing medical care provider;
 - v. securing payment for the ordered medical supply;
 - vi. crediting payment for the prescribed medical supply to an account associated with the medical care provider; and
 - vii. debiting the sales price of the prescribed medical supply to an account associated with the medical care provider.

13. The method of claim 12 wherein the web site of the medical care provider is linked to an e-commerce provider and wherein one or more transactions relating to the ordering or delivery of the prescribed medical supply is transacted through the e-commerce provider.

14. The method of claim 13 including directing payment information from the patient to the e-commerce provider that in turn authorizes payment.

15. The method of claim 14 wherein the e-commerce provider credits the account of the medical care provider and also charges the medical care provider a transaction fee.

16. The method of claim 13 wherein the e-commerce provider is linked to one or more vendors represented in the medical supply store associated with the web site of the medical care provider.

17. The method of claim 16 wherein for each order and sale, the e-commerce provider effectuates payment for the ordered medical supply, appropriately credits an account of the medical care provider, and communicates the order to a selected vendor.

18. A method of prescribing and delivering medial supplies to patients comprising:

- a. prescribing a medical supply to a patient through a medical care provider;
- b. accessing a web page associated with the prescribing medical care provider;
- c. accessing a medical supply store associated with the web page of the medical supply provider;

- d. locating the prescribed medical supply within the medical supply store;
and
- e. ordering the prescribed medical supply.

19. The method of claim 18 wherein the medical supply provider's web page is linked to an e-commerce provider that takes the order for a prescribed medical supply and effectuates the payment and crediting of certain accounts associated with the transaction and arranges for the delivery of these prescribed medical supplies to the patient.

ABSTRACT

A medical care provider provides a network gateway with descriptions of frequently prescribed medical devices thereon. A patient may access the gateway and use the gateway to facilitate the purchase of a prescribed medical device. The gateway communicates through an e-commerce provider to a medical supply vendor to arrange for the shipping of the purchased medical device and arrange for payment thereto.

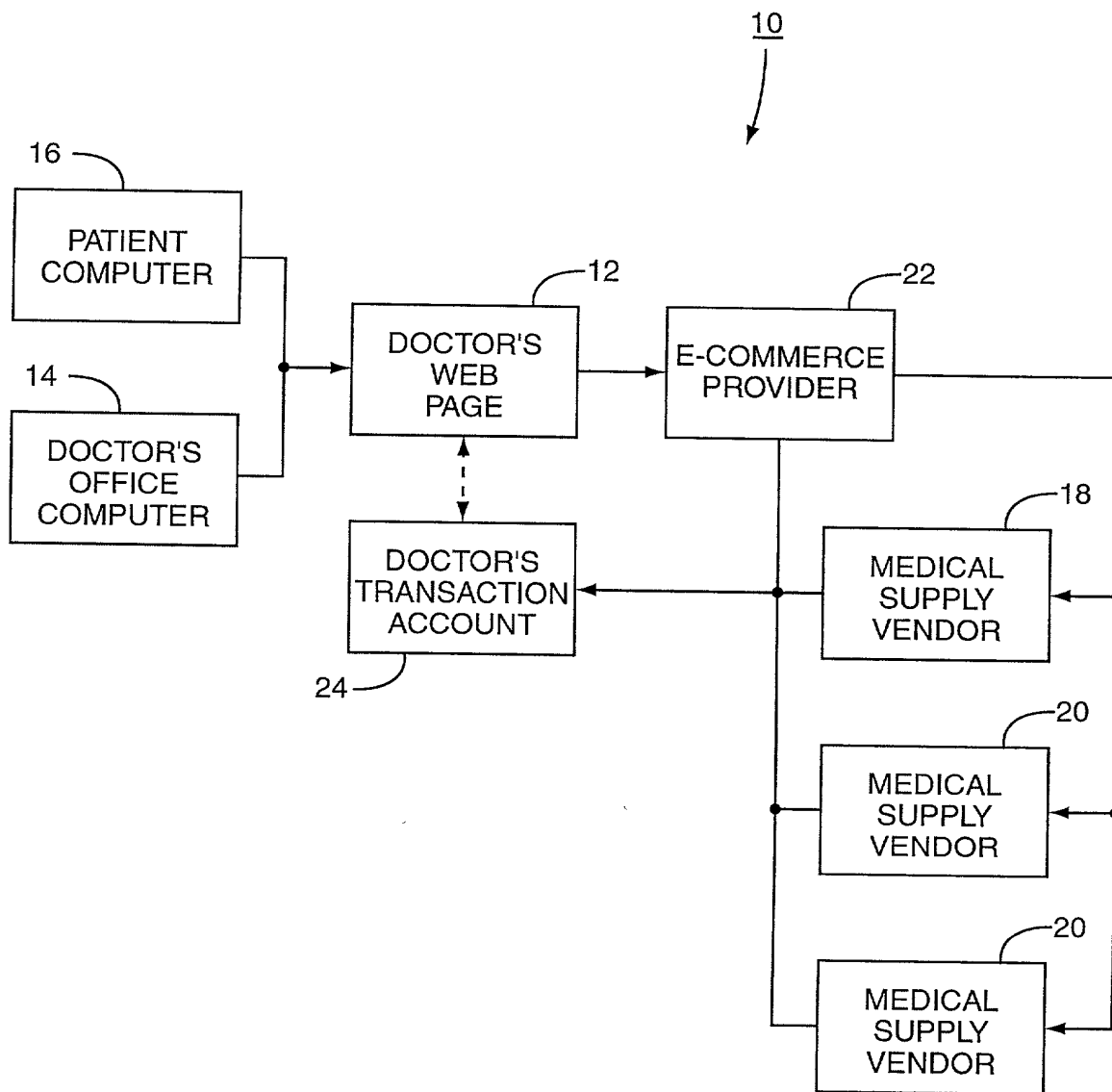


FIG. 1

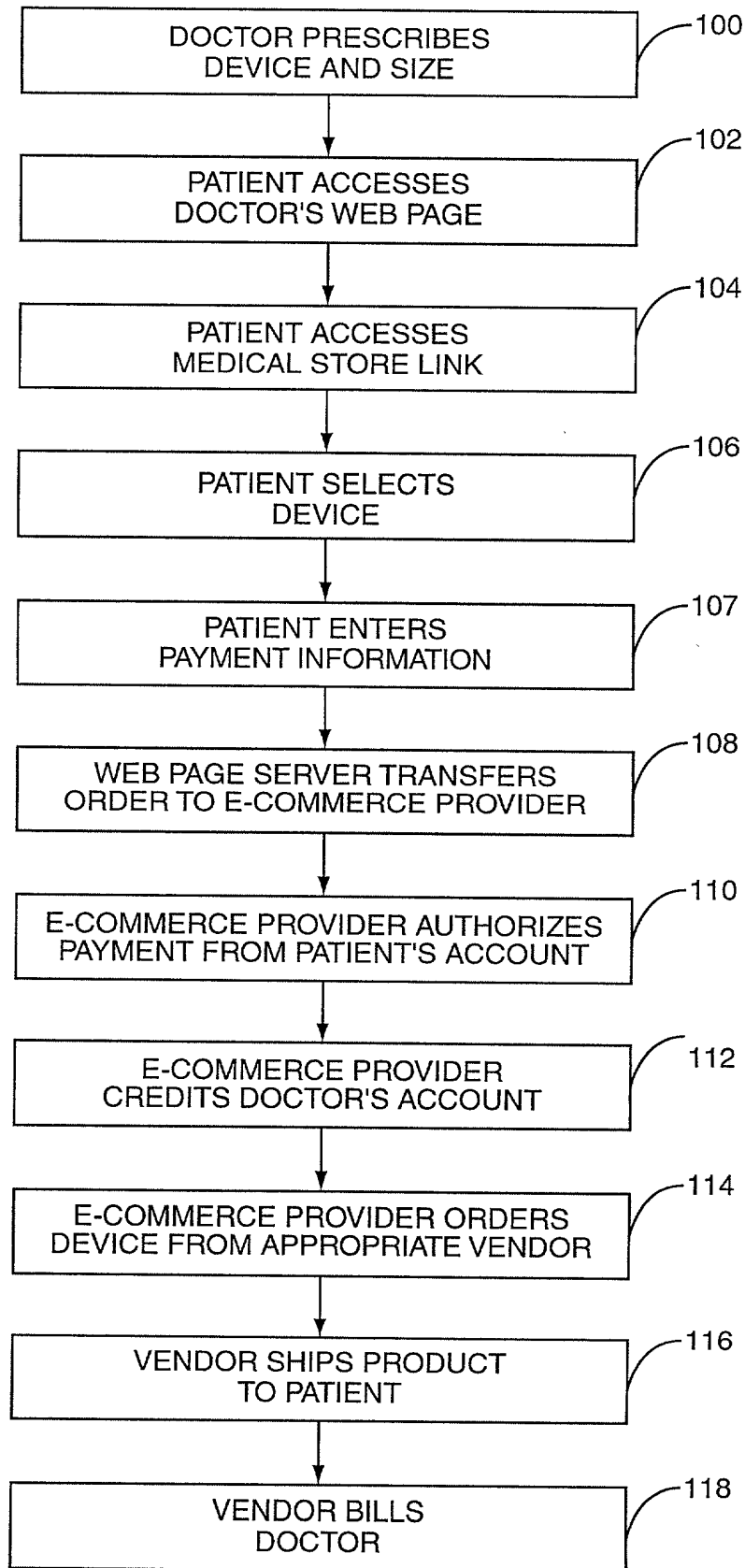


FIG. 2

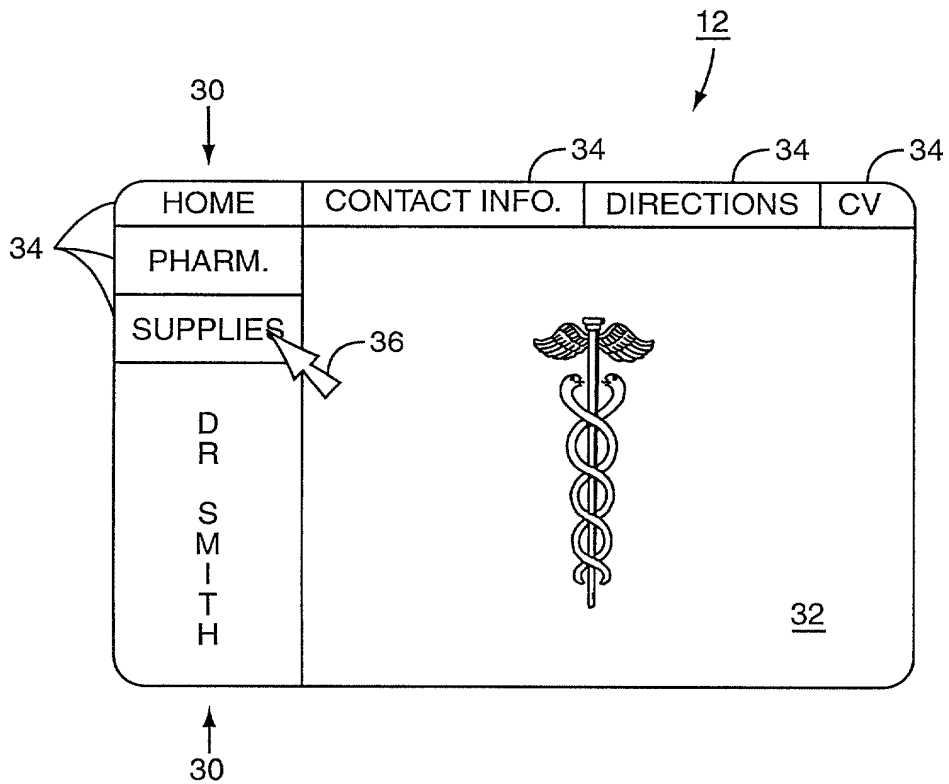


FIG. 3A

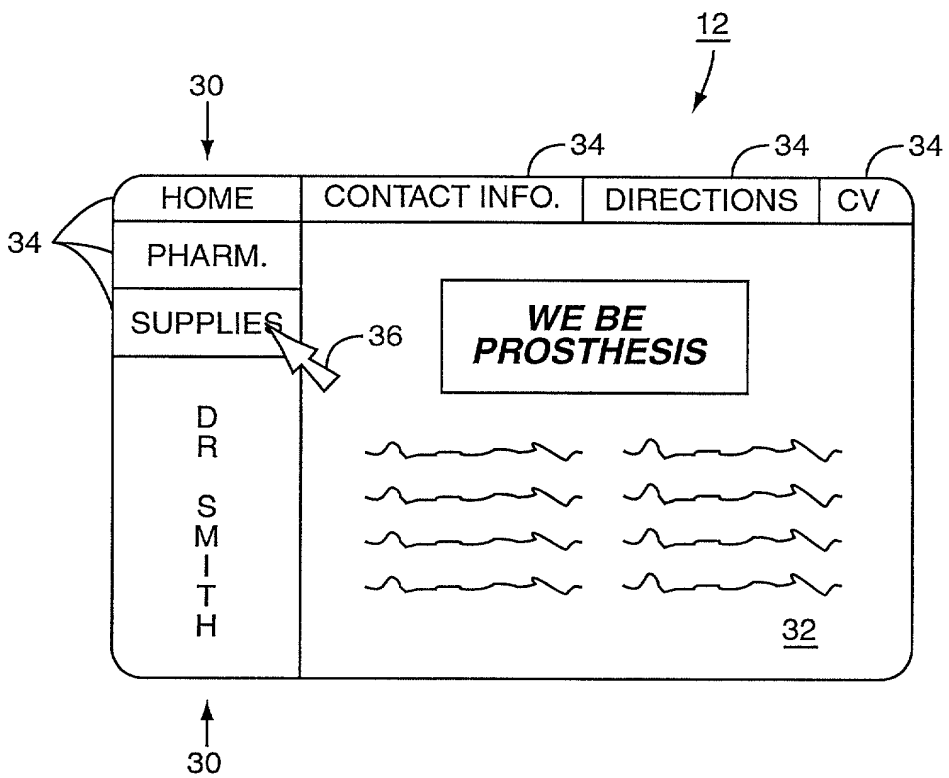


FIG. 3B

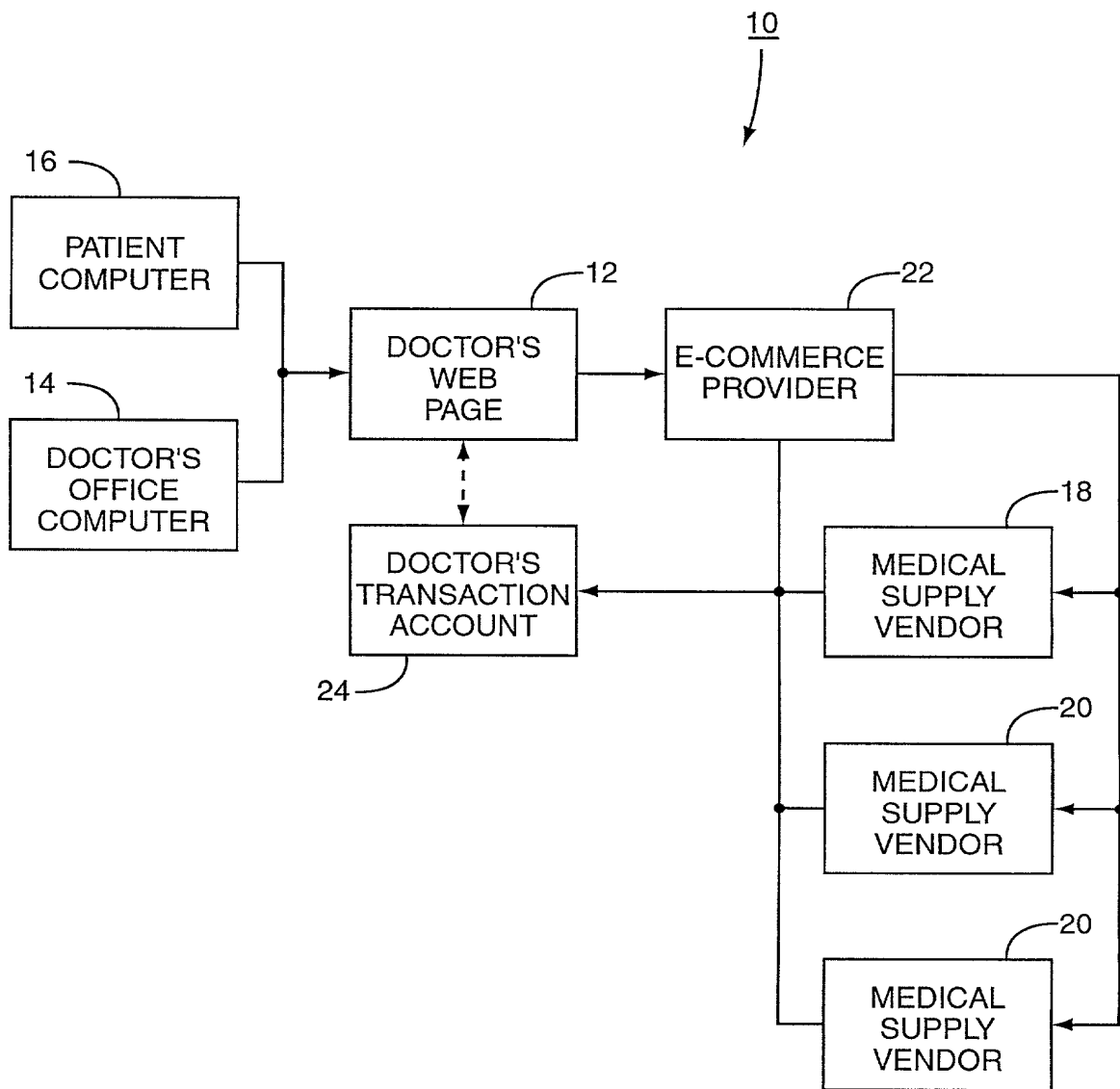


FIG. 1

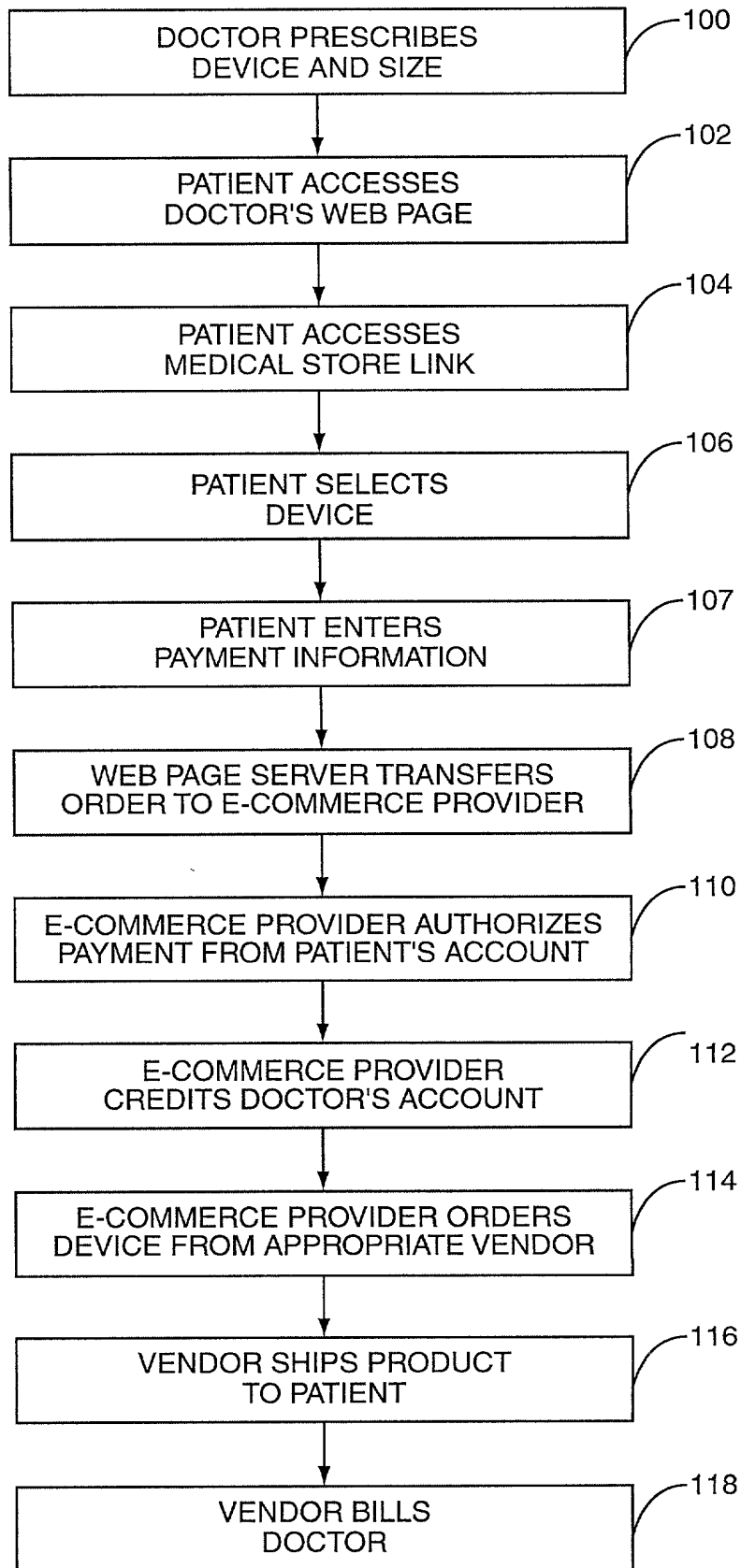


FIG. 2

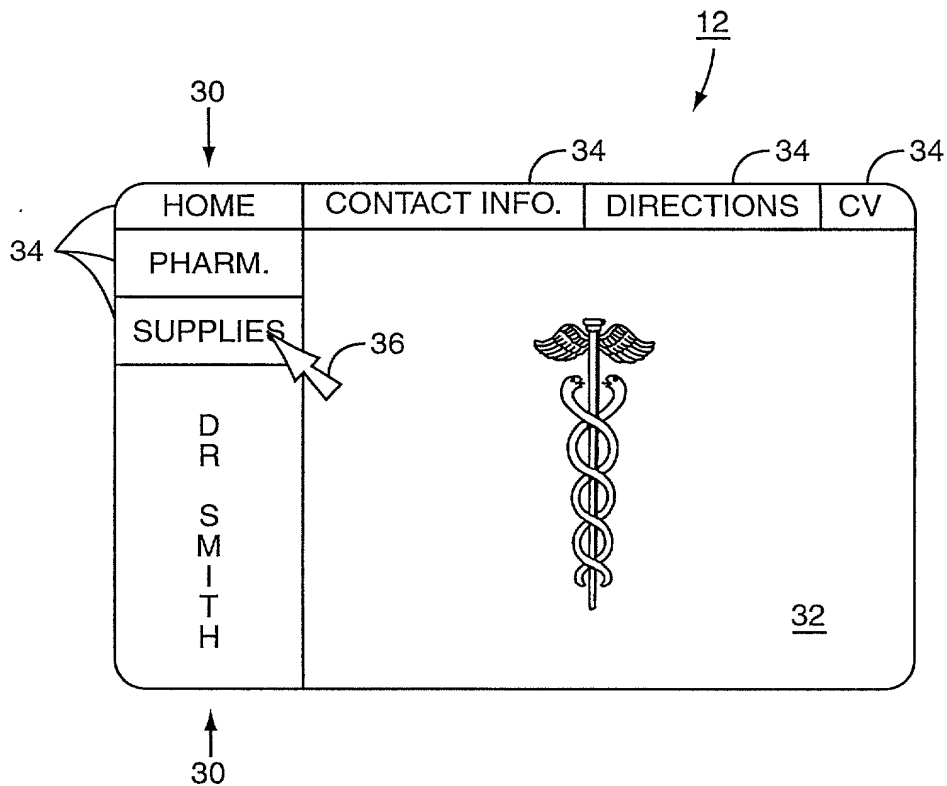


FIG. 3A

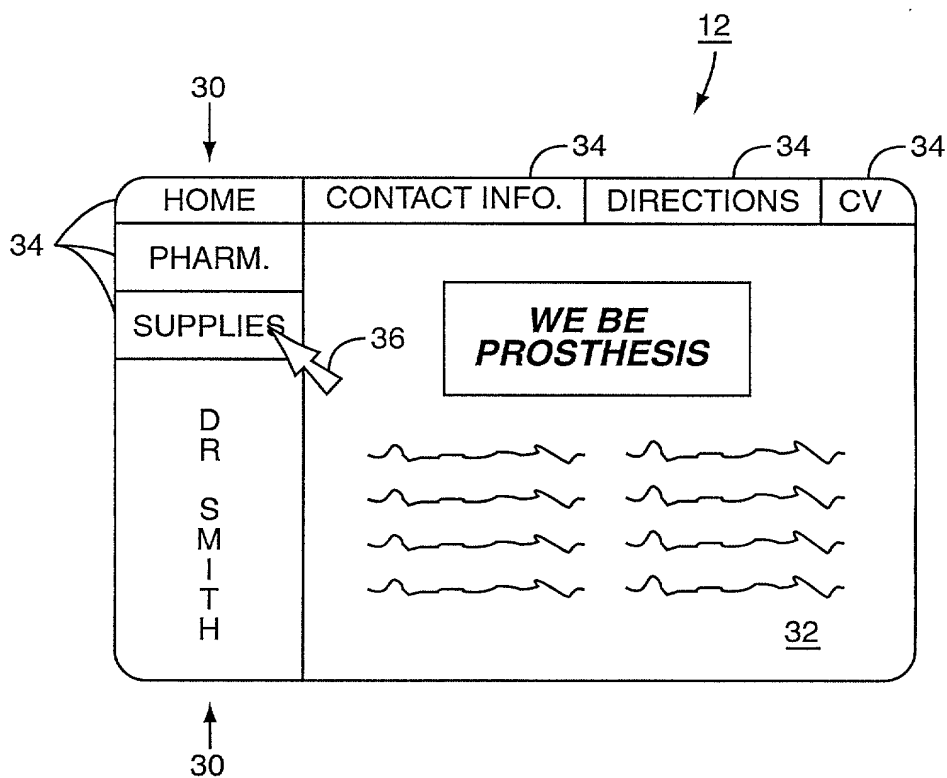


FIG. 3B

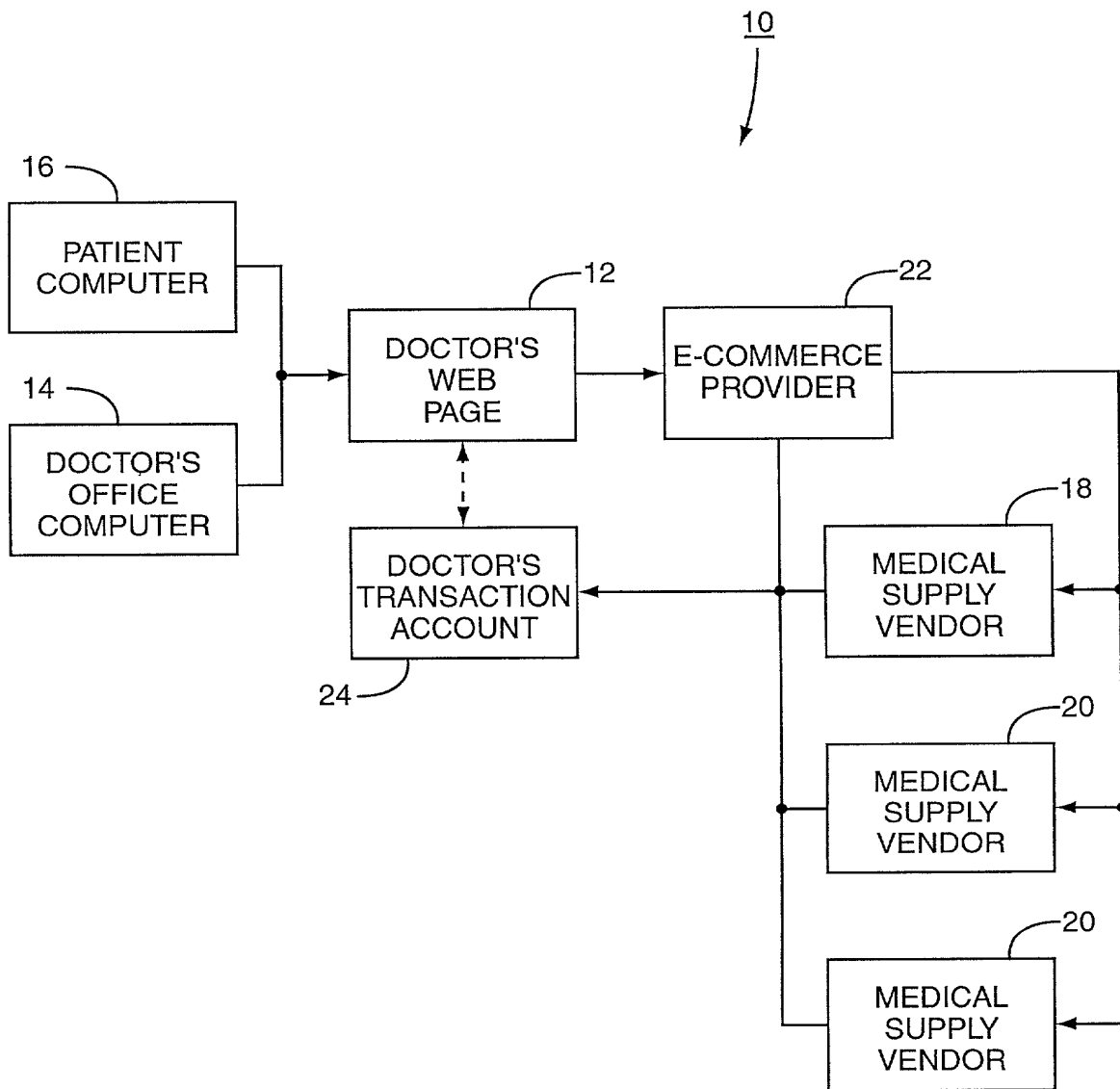


FIG. 1

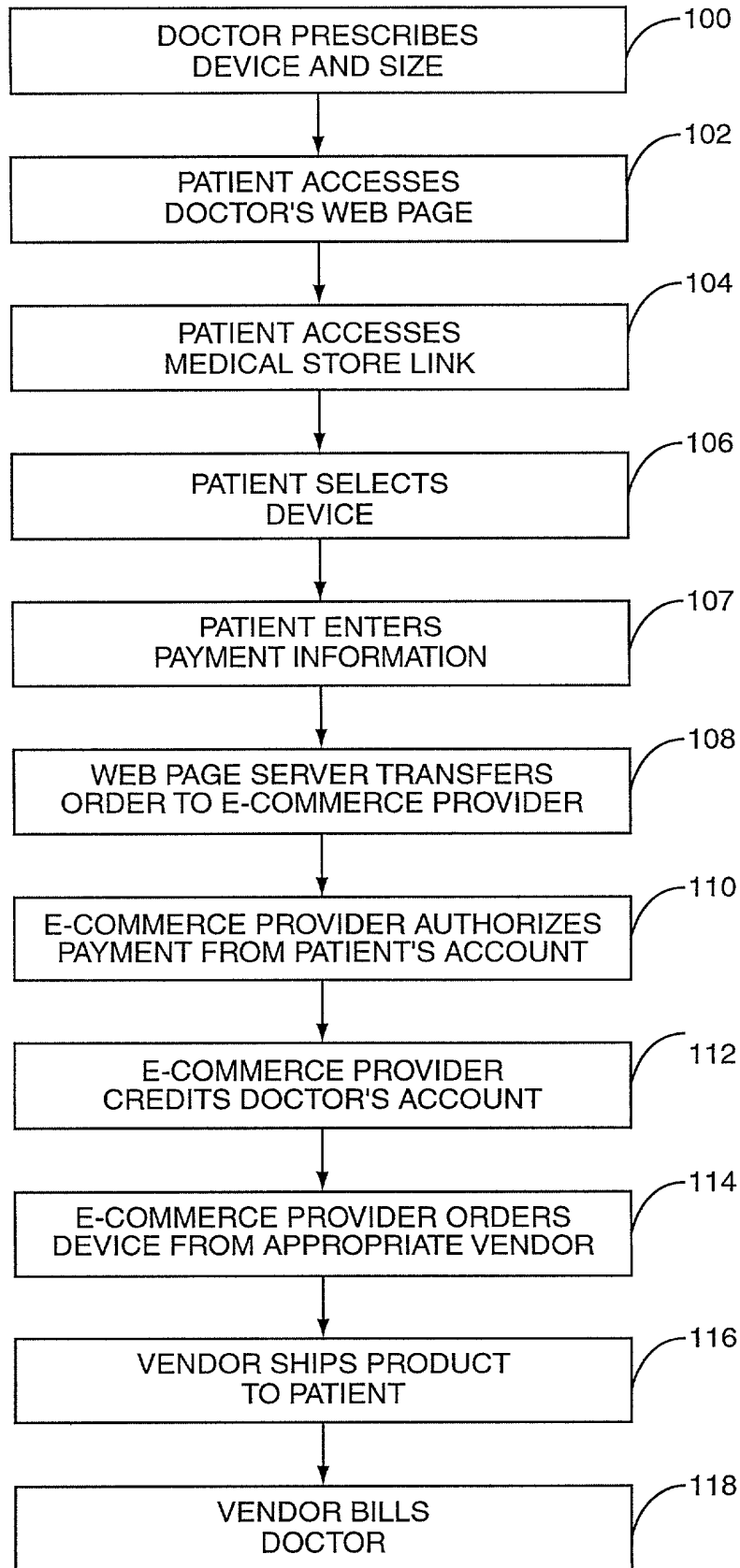


FIG. 2

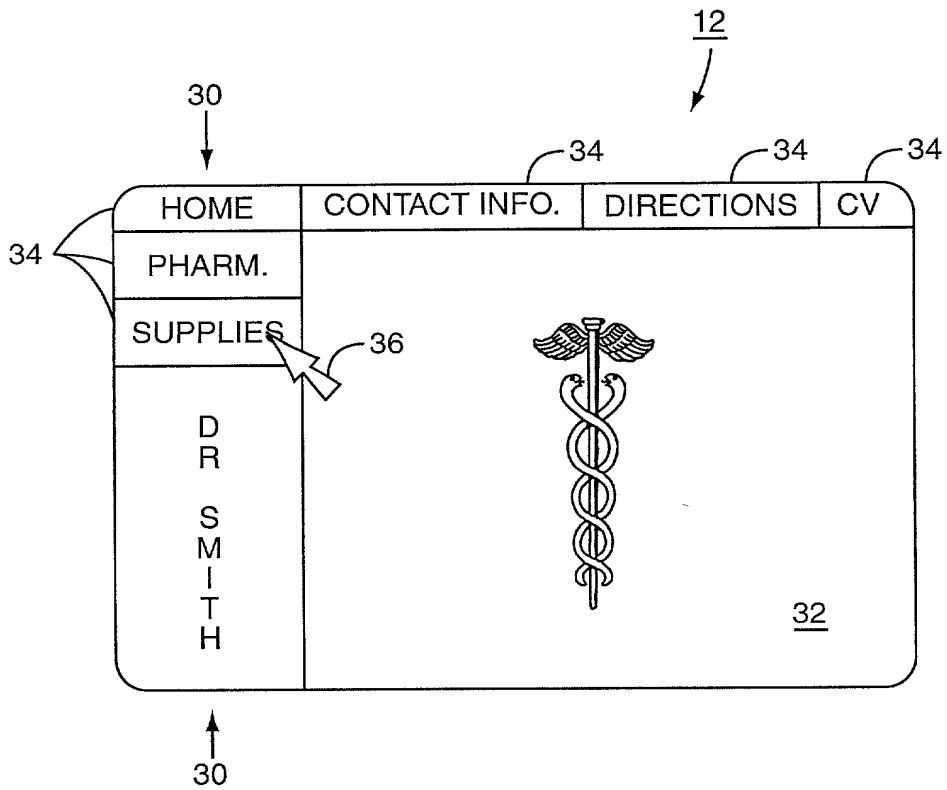


FIG. 3A

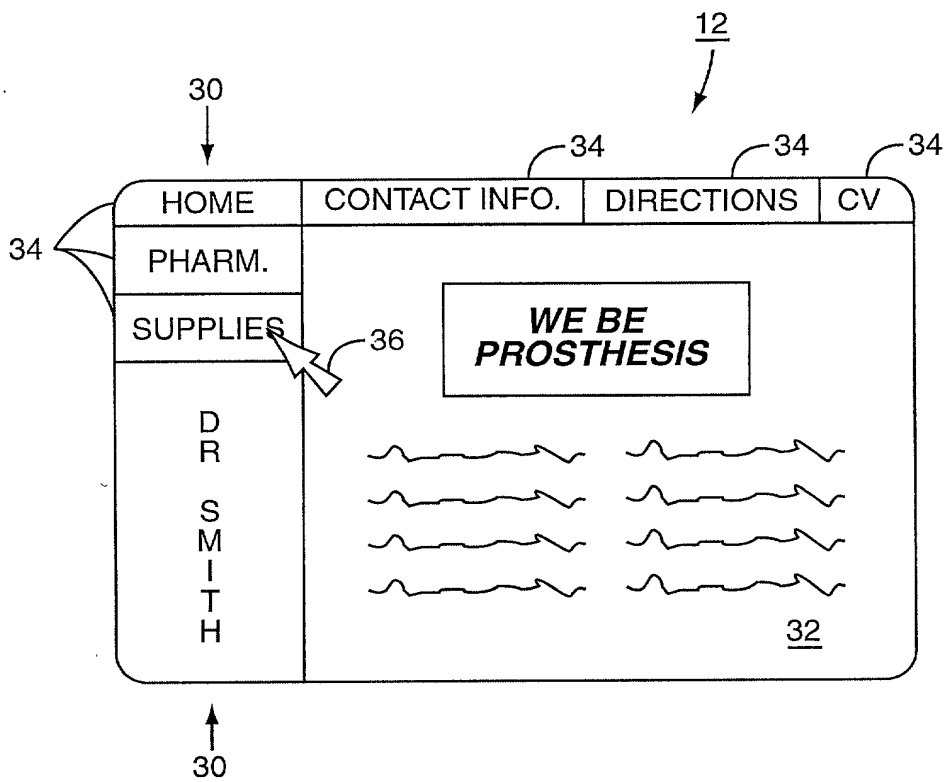


FIG. 3B

RULE 63 (37 C.F.R. 1.63)
DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

As a below named inventor, I hereby declare that my residence, post office address and citizenship are as stated below next to my name, and I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

METHOD OF SUPPLYING AND DISPENSING PRESCRIBED MEDICAL SUPPLIES THROUGH A WEB SITE
ASSOCIATED WITH A MEDICAL CARE PROVIDER

_____, the specification of which (check applicable box(es):

☒ [X] is attached hereto;

☐ [] was filed on _____ as U.S. Application Serial No. _____

☐ [] was filed as PCT international application No. PCT/_____/_____ on _____ and (if applicable to U.S. or PCT application) was amended on _____.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above. I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with 37 C.F.R. 1.56(a). I hereby claim foreign priority benefits under 35 U.S.C. 119/365 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed or, if no priority is claimed before the filing date of this application:

Prior Foreign Application(s):

Application Number

Country

Day/Month/Year Filed

I hereby claim the benefit under 35 U.S.C. 120/365 of all prior United States and PCT international applications listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in such prior application in the manner provided by the first paragraph of 35 U.S.C. 112, I acknowledge the duty to disclose material information as defined in 37 C.F.R. 1.56(a) which occurred between the filing date of the prior applications and the national or PCT international filing date of this application:

Prior U.S./PCT Application(s):

Application Serial No.

Day/Month/Year Filed

Status: patented, pending, abandoned

I hereby declare that all statements made herein of my knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under §1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon. And I hereby appoint the firm of **Coats & Bennett, P.L.L.C.**, comprising Larry L. Coats, Reg. No. 25,620, David E. Bennett, Reg. No. 32,194, John R. Owen, Reg. 42,055, David D. Kalish, Reg. No. 42,706, Taylor M. Davenport, Reg. No. 42,466 and Michael D. Murphy, Prov. Reg. No. 44,958; of 1100 Crescent Green, Suite 206, Cary, NC 27511, P.O. Box 5, Raleigh, NC 27602, (919) 854-1844 (to whom all communications should be directed); as my attorneys and/or agents with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith.

1) Inventor's Signature _____

Date _____

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Middle Initial

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Family Name

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Citizenship

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